

LTE Band 7

Conducted Power of LTE Band 7							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					20775	21100	21425
5MHz	QPSK	1	0	24.50	24.12	24.20	22.39
			12	25.00	22.67	24.69	22.96
			24	23.50	23.22	22.85	22.56
		12	0	24.00	23.63	22.08	22.14
			6	23.50	22.23	22.81	23.12
			13	24.00	23.06	23.78	22.75
		25	0	23.50	22.40	23.07	22.63
	16QAM	1	0	24.00	23.67	22.93	22.20
			12	23.50	23.15	23.35	22.82
			24	23.50	23.20	22.98	22.64
		12	0	24.50	24.12	22.80	22.82
			6	23.50	23.05	22.81	22.94
			13	23.50	22.58	23.06	23.14
		25	0	23.50	22.96	23.07	22.81
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					20800	21100	21400
10MHz	QPSK	1	0	23.50	23.25	22.36	23.02
			24	23.00	22.88	22.69	22.43
			49	24.50	24.45	22.79	22.30
		25	0	23.50	23.49	22.69	22.72
			12	23.50	23.21	22.73	22.59
			25	23.00	22.75	22.77	22.41
		50	0	23.50	22.49	23.03	22.23
	16QAM	1	0	23.00	22.89	22.81	22.30
			24	23.00	22.98	22.77	22.63
			49	24.00	23.79	22.43	22.85
		25	0	23.50	22.59	22.50	23.10
			12	23.00	22.98	22.49	22.80
			25	23.50	22.95	23.14	22.61
		50	0	23.00	22.31	22.88	22.66

Conducted Power of LTE Band 7							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					20825	21100	21375
15MHz	QPSK	1	0	24.50	22.05	24.49	23.05
			37	23.50	23.22	22.46	22.31
			74	23.50	23.16	22.98	22.70
		37	0	23.00	22.40	22.80	22.10
			18	23.00	22.69	22.12	22.95
			38	23.00	22.75	22.24	22.89
		75	0	23.00	22.99	22.53	22.34
	16QAM	1	0	24.00	22.23	24.00	22.25
			37	23.50	22.17	23.23	22.48
			74	23.00	22.30	22.69	22.65
		37	0	23.00	22.42	22.55	22.96
			18	23.00	22.96	22.49	22.66
			38	23.50	22.33	23.16	22.24
		75	0	23.00	22.06	22.83	22.09
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					20850	21100	21350
20MHz	QPSK	1	0	25.00	23.39	24.78	23.53
			49	24.50	23.33	24.43	23.09
			99	23.00	23.00	22.82	22.58
		50	0	25.00	23.29	24.75	22.98
			25	23.50	22.33	23.18	23.11
			50	23.50	23.33	23.07	22.54
		100	0	24.00	23.90	22.16	22.36
	16QAM	1	0	25.00	22.25	24.60	22.82
			49	24.00	23.68	23.89	22.63
			99	23.00	22.38	22.70	22.98
		50	0	24.50	22.28	24.34	22.45
			25	23.50	22.37	22.94	23.06
			50	23.00	22.80	22.21	22.76
		100	0	23.00	22.84	22.83	22.82

LTE Band 12

Conducted Power of LTE Band 12							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23017	23095	23173
1.4MHz	QPSK	1	0	24.00	23.48	23.76	23.16
			3	24.50	22.55	24.24	22.56
			5	23.50	23.26	22.94	22.49
		3	0	23.00	22.95	22.49	22.92
			2	23.50	22.94	22.32	23.24
			3	23.50	23.29	22.83	22.85
	16QAM	1	0	23.00	22.94	22.74	22.85
			0	25.00	24.51	23.65	22.94
			3	25.00	22.41	24.51	22.07
		3	5	23.50	23.48	22.69	22.41
			0	23.50	23.28	22.36	23.14
			2	23.50	22.79	22.38	23.01
		6	3	23.50	23.29	23.33	22.79
			0	23.50	23.13	22.46	22.79
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23025	23095	23165
3MHz	QPSK	1	0	23.50	23.24	22.54	23.06
			7	23.00	22.95	22.45	22.46
			14	24.00	23.94	22.85	22.10
		8	0	23.50	22.92	22.44	23.01
			4	23.00	22.74	22.94	22.34
			7	23.00	22.75	22.04	22.90
	16QAM	15	0	23.00	22.34	22.75	22.82
		1	0	23.50	23.39	22.68	23.17
			7	23.50	23.48	22.51	22.43
			14	24.50	24.30	22.81	22.27
		8	0	23.50	23.15	22.21	23.20
			4	23.00	22.50	22.84	22.07
			7	23.00	22.97	22.91	22.67
		15	0	23.00	22.53	22.37	22.89

Conducted Power of LTE Band 12							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23035	23095	23155
5MHz	QPSK	1	0	24.00	22.43	23.76	22.92
			12	24.00	23.50	22.55	22.86
			24	23.00	22.58	22.71	22.34
		12	0	23.00	22.67	22.77	22.57
			6	23.00	22.75	22.96	22.25
			13	22.50	21.99	22.40	22.43
		25	0	23.00	22.01	22.51	22.65
	16QAM	1	0	24.50	22.70	24.11	22.82
			12	24.00	23.63	22.51	22.96
			24	23.00	22.94	22.86	22.65
		12	0	23.00	22.56	22.79	22.69
			6	23.00	22.67	22.77	22.21
			13	23.00	22.94	22.52	22.38
		25	0	23.00	22.38	22.65	22.41
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23060	23095	23130
10MHz	QPSK	1	0	25.00	24.90	24.47	24.85
			24	24.50	22.80	24.20	22.53
			49	23.00	22.51	22.98	22.94
		25	0	24.50	23.11	24.27	24.38
			12	23.00	22.13	22.69	22.16
			25	23.00	22.66	22.73	22.70
		50	0	24.00	23.78	22.94	22.37
	16QAM	1	0	25.00	24.76	24.49	24.66
			24	25.00	22.92	23.95	24.60
			49	23.00	22.66	22.82	22.98
		25	0	24.50	23.11	23.81	24.07
			12	23.00	22.25	22.51	22.91
			25	23.00	22.66	22.65	22.81
		50	0	24.00	23.72	23.06	22.14

LTE Band 17

Conducted Power of LTE Band 17							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23755	23790	23825
5MHz	QPSK	1	0	24.50	24.46	23.75	22.92
			12	24.50	22.91	24.14	23.19
			24	24.00	23.94	22.88	23.05
		12	0	24.00	23.87	23.02	22.42
			6	23.00	22.32	22.96	22.55
			13	24.00	23.63	23.09	22.65
		25	0	23.00	22.72	22.65	23.00
	16QAM	1	0	23.50	23.01	23.19	22.14
			12	23.00	22.90	22.72	22.85
			24	23.50	23.30	23.09	22.21
		12	0	23.50	23.28	22.72	23.02
			6	23.00	22.61	22.96	22.69
			13	23.00	22.38	22.29	22.74
		25	0	23.50	23.00	23.19	22.91
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					23780	23790	23800
10MHz	QPSK	1	0	25.00	23.66	22.16	24.85
			24	23.00	22.19	22.51	22.89
			49	24.50	24.35	22.69	22.81
		25	0	25.00	22.88	22.04	24.54
			12	23.00	22.58	22.62	22.69
			25	23.00	22.63	22.16	22.94
		50	0	23.50	23.05	22.82	22.75
	16QAM	1	0	25.00	22.80	22.30	24.72
			24	24.50	23.25	22.14	24.43
			49	23.50	23.15	22.54	22.35
		25	0	24.50	22.06	22.87	24.22
			12	23.50	22.68	23.23	22.40
			25	23.00	22.64	22.30	22.98
		50	0	23.00	22.78	22.34	22.80

LTE Band 66

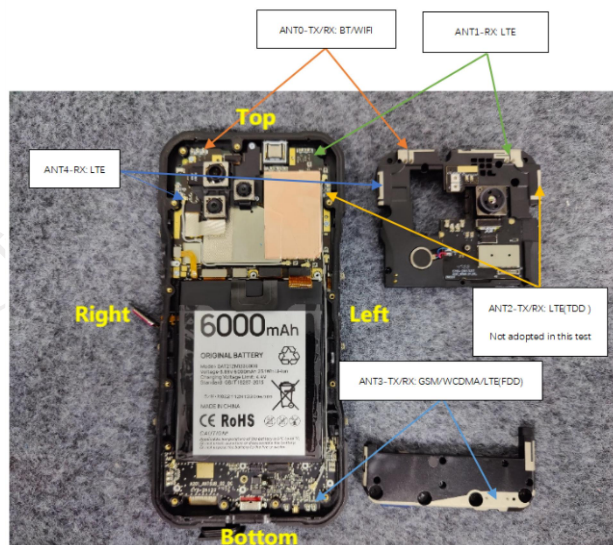
Conducted Power of LTE Band 66							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					131979	132322	132665
1.4MHz	QPSK	1	0	24.50	24.29	23.67	22.80
			3	24.00	23.13	23.80	22.25
			5	24.50	24.16	23.19	22.41
		3	0	23.50	23.43	22.65	22.10
			2	23.50	22.58	22.89	23.34
			3	23.50	22.85	23.34	23.20
		6	0	23.50	22.89	22.43	23.41
	16QAM	1	0	23.50	23.15	22.81	22.55
			3	24.00	23.91	23.34	23.19
			5	23.50	22.35	22.99	23.09
		3	0	24.00	23.51	23.27	22.59
			2	23.50	22.57	23.23	23.02
			3	23.00	22.65	22.07	22.43
		6	0	23.50	23.03	23.25	22.44
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					131987	132322	132657
3MHz	QPSK	1	0	24.00	23.86	22.15	22.67
			7	23.00	22.55	22.86	22.36
			14	24.50	24.25	23.17	22.41
		8	0	23.50	22.37	23.07	22.44
			4	23.00	22.32	22.97	22.61
			7	23.00	22.13	22.51	22.86
		15	0	23.00	22.76	22.88	22.98
	16QAM	1	0	23.00	22.93	22.43	22.66
			7	23.00	22.60	22.09	22.75
			14	23.50	23.43	22.10	22.36
		8	0	23.00	22.46	22.25	22.89
			4	23.00	22.92	22.13	22.96
			7	23.00	22.84	22.99	22.99
		15	0	23.50	22.80	22.74	23.11

Conducted Power of LTE Band 66							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					131997	132322	132647
5MHz	QPSK	1	0	25.00	22.03	24.53	23.17
			12	23.50	23.23	23.13	22.46
			24	23.00	22.92	22.41	22.54
		12	0	23.00	22.36	22.67	22.22
			6	23.00	22.35	22.81	22.47
			13	23.50	23.02	22.51	22.41
		25	0	23.00	22.22	22.68	22.29
	16QAM	1	0	25.00	22.16	24.54	22.94
			12	24.00	22.49	23.66	22.69
			24	23.00	22.53	22.84	22.45
		12	0	23.00	22.46	22.72	22.96
			6	23.00	22.97	22.85	22.43
			13	23.00	22.70	22.43	22.44
		25	0	23.00	22.89	22.07	22.86
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					132022	132322	132622
10MHz	QPSK	1	0	24.50	24.39	22.64	23.52
			24	24.00	22.97	23.95	22.35
			49	23.00	22.45	22.80	22.66
		25	0	22.50	22.29	22.26	22.37
			12	23.00	22.52	22.77	22.46
			25	23.50	23.03	22.34	22.62
		50	0	24.00	23.51	22.94	22.89
	16QAM	1	0	24.00	22.97	23.85	22.63
			24	23.50	23.21	23.46	23.27
			49	23.00	22.48	22.75	22.93
		25	0	23.00	22.76	22.42	22.38
			12	23.50	22.31	22.71	23.26
			25	23.00	22.67	22.68	22.27
		50	0	23.50	23.30	22.71	22.56

Conducted Power of LTE Band 66							
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					132047	132322	132597
15MHz	QPSK	1	0	23.50	23.03	23.10	22.29
			37	24.50	22.64	24.05	23.57
			74	23.00	22.61	23.00	22.98
		37	0	23.50	23.14	22.39	22.31
			18	23.50	22.41	23.10	22.79
			38	23.00	22.19	22.38	22.79
		75	0	24.00	23.65	22.27	22.22
	16QAM	1	0	24.00	22.89	23.60	22.09
			37	24.00	23.99	22.57	22.78
			74	23.00	21.95	22.79	22.38
		37	0	23.00	22.24	22.44	22.62
			18	23.00	22.23	22.56	22.32
			38	23.50	22.53	23.17	23.16
		75	0	23.50	23.10	22.49	22.11
Bandwidth	Modulation	RB size	RB offset	Maximum Tune-up (dBm)	Channel	Channel	Channel
					132072	132322	132572
20MHz	QPSK	1	0	25.00	23.49	22.22	24.87
			49	25.00	22.68	24.87	22.07
			99	24.50	22.26	24.07	22.28
		50	0	25.00	22.38	24.67	22.71
			25	24.00	23.53	23.98	22.85
			50	24.50	23.03	24.37	22.62
		100	0	24.00	22.62	23.77	22.86
	16QAM	1	0	25.00	22.53	22.58	24.61
			49	24.00	23.91	22.15	22.77
			99	23.50	23.00	22.86	23.03
		50	0	23.50	22.13	23.46	22.71
			25	23.00	22.99	22.69	22.40
			50	24.50	22.08	24.35	22.35
		100	0	23.50	23.11	22.78	22.78

9. Exposure Position Consideration

9.1. Antenna information



WWAN Main Antenna	GSM/WCDMA/LTE(FDD) TX/RX
WWAN Main Antenna	LTE(TDD) TX/RX (not adopted in this test)
WLAN/BT Antenna	WLAN/BT TX/RX
Diversity Antenna	LTE RX

Note:
A) Per KDB648474 D04, 10-g extremity SAR is not required when Body-Worn mode 1-g reported SAR<1.2W/Kg.
B) According to the KDB941225 D06 Hot Spot SAR v02, When the overall device length and width are ≥ 9cm*5cm, the test distance is 10mm, SAR must be measured for all sides and surfaces with a transmitting antenna located with 25mm from that surface or edge.

Distance of The Antenna to the EUT surface and edge (mm)						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	<25	<25	<25	50	158	<25
BT/Wifi	<25	<25	50	<25	<25	158

9.2. Test Position Consideration

Positions for SAR tests: Hotspot mode						
Antenna	Front Side (mm)	Back Side (mm)	Left Edge (mm)	Right Edge (mm)	Top Edge (mm)	Bottom Edge (mm)
WWAN	Yes	Yes	Yes	No	No	Yes
BT/Wifi	Yes	Yes	No	Yes	Yes	No

10. SAR Test Results Summary

10.1. Head 1g SAR Data

Band	Mode	Test Position with 0mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
GSM850	GPRS 4slots	Left-Cheek	190	836.6	33.77	34.00	1.050	0.430	1.054	0.453	1.60
		Left-Tilt	190	836.6	33.77	34.00	0.990	0.321	1.054	0.338	
		Right-Cheek	190	836.6	33.77	34.00	-2.880	0.433	1.054	0.456	
		Right-Tilt	190	836.6	33.77	34.00	1.440	0.322	1.054	0.339	
GSM1900	GPRS 4slots	Left-Cheek	661	1880.0	29.28	29.50	-0.210	0.156	1.052	0.164	
		Left-Tilt	661	1880.0	29.28	29.50	2.680	0.151	1.052	0.159	
		Right-Cheek	661	1880.0	29.28	29.50	-3.270	0.158	1.052	0.166	
		Right-Tilt	661	1880.0	29.28	29.50	-1.660	0.154	1.052	0.162	
WCDMA Band II	RMC	Left-Cheek	9400	1880.0	23.82	24.00	0.830	0.104	1.042	0.108	
		Left-Tilt	9400	1880.0	23.82	24.00	-1.201	0.082	1.042	0.085	
		Right-Cheek	9400	1880.0	23.82	24.00	-2.770	0.107	1.042	0.111	
		Right-Tilt	9400	1880.0	23.82	24.00	-3.800	0.085	1.042	0.089	
WCDMA Band IV	RMC	Left-Cheek	1450	1740.0	24.82	25.00	-0.670	0.076	1.042	0.079	
		Left-Tilt	1450	1740.0	24.82	25.00	-3.570	0.074	1.042	0.077	
		Right-Cheek	1450	1740.0	24.82	25.00	-1.450	0.078	1.042	0.081	
		Right-Tilt	1450	1740.0	24.82	25.00	-1.700	0.077	1.042	0.080	
WCDMA Band V	RMC	Left-Cheek	4183	836.6	23.95	24.00	-1.450	0.210	1.012	0.213	
		Left-Tilt	4183	836.6	23.95	24.00	-1.020	0.125	1.012	0.127	
		Right-Cheek	4183	836.6	23.95	24.00	-1.960	0.215	1.012	0.218	
		Right-Tilt	4183	836.6	23.95	24.00	1.240	0.128	1.012	0.130	
BT	Classical	Left-Cheek	1	2402	6.23	6.50	-0.280	0.085	1.064	0.090	
		Left-Tilt	1	2402	6.23	6.50	-1.300	0.050	1.064	0.053	
		Right-Cheek	1	2402	6.23	6.50	2.730	0.082	1.064	0.087	
		Right-Tilt	1	2402	6.23	6.50	1.970	0.051	1.064	0.054	
2.4G	802.11b	Left-Cheek	6	2437	18.81	19.00	-1.880	0.182	1.045	0.190	
		Left-Tilt	6	2437	18.81	19.00	-3.570	0.185	1.045	0.193	
		Right-Cheek	6	2437	18.81	19.00	-2.400	0.184	1.045	0.192	
		Right-Tilt	6	2437	18.81	19.00	-1.340	0.186	1.045	0.194	
5.2G	802.11ac (VTH40)	Left-Cheek	38	5190	17.91	18.00	0.700	0.171	1.021	0.175	
		Left-Tilt	38	5190	17.91	18.00	1.255	0.175	1.021	0.179	
		Right-Cheek	38	5190	17.91	18.00	2.851	0.172	1.021	0.176	
		Right-Tilt	38	5190	17.91	18.00	-2.980	0.177	1.021	0.181	
5.8G	802.11ac (VTH40)	Left-Cheek	151	5755	17.79	18.00	-1.334	0.210	1.050	0.221	
		Left-Tilt	151	5755	17.79	18.00	-0.950	0.217	1.050	0.228	
		Right-Cheek	151	5755	17.79	18.00	-1.603	0.211	1.050	0.222	
		Right-Tilt	151	5755	17.79	18.00	-1.228	0.218	1.050	0.229	

Note:

1. The frame average of GPRS 850 (4Tx slots) & GPRS 1900 (4Tx slots) higher than GSM and sample can support VOIP function, tested at GPRS mode for head.

Band	Mode	Test Position with 0mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/Kg)
LTE Band 2	QPSK (20MHz)	Left-Cheek	18900	1880	1	0	24.94	25.00	-1.160	0.141	1.014	0.143	1.60
					50	0	24.22	24.50	0.556	0.135	1.067	0.144	
		Left-Tilt	18900	1880	1	0	24.94	25.00	0.980	0.120	1.014	0.122	
					50	0	24.22	24.50	-0.850	0.114	1.067	0.122	
		Right-Cheek	18900	1880	1	0	24.94	25.00	0.350	0.146	1.014	0.148	
					50	0	24.22	24.50	1.500	0.138	1.067	0.147	
		Right-Tilt	18900	1880	1	0	24.94	25.00	-1.330	0.127	1.014	0.129	
					50	0	24.22	24.50	2.840	0.100	1.067	0.107	
LTE Band 4	QPSK (20MHz)	Left-Cheek	20175	1732.5	1	0	24.94	25.00	-1.160	0.205	1.014	0.208	
					50	0	24.53	25.00	-1.100	0.185	1.114	0.206	
		Left-Tilt	20175	1732.5	1	0	24.94	25.00	0.980	0.151	1.014	0.153	
					50	0	24.53	25.00	1.500	0.136	1.114	0.152	
		Right-Cheek	20175	1732.5	1	0	24.94	25.00	4.100	0.237	1.014	0.240	
					50	0	24.53	25.00	-0.150	0.214	1.114	0.238	
		Right-Tilt	20175	1732.5	1	0	24.94	25.00	2.503	0.135	1.014	0.137	
					50	0	24.53	25.00	2.008	0.122	1.114	0.136	
LTE Band 5	QPSK (10MHz)	Left-Cheek	20600	844	1	0	24.80	25.00	-1.160	0.259	1.047	0.271	
					25	0	22.92	23.00	-1.300	0.254	1.019	0.259	
		Left-Tilt	20600	844	1	0	24.80	25.00	0.980	0.238	1.047	0.249	
					25	0	22.92	24.50	2.050	0.236	1.019	0.240	
		Right-Cheek	20600	844	1	0	24.80	25.00	3.090	0.271	1.047	0.284	
					25	0	22.92	24.50	3.160	0.267	1.019	0.272	
		Right-Tilt	20600	844	1	0	24.80	25.00	2.503	0.250	1.047	0.262	
					25	0	22.92	24.50	-1.056	0.247	1.019	0.252	

LTE Band 7	QPSK (20MHz)	Left-Cheek	21100	2535	1	0	24.78	25.00	-2.000	0.045	1.052	0.047
					50	0	24.75	25.00	1.980	0.040	1.059	0.042
		Left-Tilt	21100	2535	1	0	24.78	25.00	0.980	0.024	1.052	0.025
					50	0	24.75	25.00	-0.622	0.022	1.059	0.023
		Right-Cheek	21100	2535	1	0	24.78	25.00	-4.150	0.057	1.052	0.060
					50	0	24.75	25.00	1.400	0.053	1.059	0.056
LTE Band 12	QPSK (10MHz)	Left-Cheek	23060	704	1	0	24.90	25.00	-1.160	0.179	1.023	0.183
					25	0	23.11	23.50	-1.360	0.166	1.094	0.182
		Left-Tilt	23060	704	1	0	24.90	25.00	0.980	0.158	1.023	0.162
					25	0	23.11	23.50	-2.411	0.145	1.094	0.159
		Right-Cheek	23060	704	1	0	24.90	25.00	-1.880	0.191	1.023	0.195
					25	0	23.11	23.50	1.236	0.176	1.094	0.193
LTE Band 17	QPSK (10MHz)	Left-Cheek	23800	711	1	0	24.85	25.00	-1.160	0.201	1.035	0.208
					25	0	24.54	25.00	-0.260	0.184	1.112	0.205
		Left-Tilt	23800	711	1	0	24.85	25.00	0.980	0.180	1.035	0.186
					25	0	24.54	25.00	0.166	0.165	1.112	0.183
		Right-Cheek	23800	711	1	0	24.85	25.00	-2.470	0.213	1.035	0.220
					25	0	24.54	25.00	-1.506	0.195	1.112	0.217
LTE Band 66	QPSK (20MHz)	Left-Cheek	132572	1770	1	0	24.87	25.00	-3.180	0.118	1.030	0.122
					50	25	22.85	23.00	1.112	0.113	1.035	0.117
		Left-Tilt	132572	1770	1	0	24.87	25.00	-0.890	0.097	1.030	0.100
					50	25	22.85	23.00	1.230	0.095	1.035	0.098
		Right-Cheek	132572	1770	1	0	24.87	25.00	-2.740	0.130	1.030	0.134
					50	25	22.85	23.00	2.150	0.126	1.035	0.130
LTE Band 66	QPSK (20MHz)	Right-Tilt	132572	1770	1	0	24.87	25.00	-0.510	0.109	1.030	0.112
					50	25	22.85	23.00	-1.620	0.106	1.035	0.110

10.2. Hotspot(Body-worn) 1g SAR Data

Band	Mode	Test Position with 10 mm	CH.	Freq. (MHz)	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/kg)
GSM 850	GPRS 4slots	Front	190	836.6	33.77	34.00	1.060	0.368	1.054	0.388	1.60
		Back	190	836.6	33.77	34.00	0.590	0.728	1.054	0.767	
		Left	190	836.6	33.77	34.00	-1.950	0.335	1.054	0.353	
		Bottom	190	836.6	33.77	34.00	-2.310	0.324	1.054	0.341	
GSM 1900	GPRS 4slots	Front	661	1880.0	29.28	29.50	-2.260	0.344	1.052	0.362	
		Back	512	1850.2	29.11	29.50	2.030	0.812	1.094	0.888	
		Back	661	1880.0	29.28	29.50	1.730	0.850	1.052	0.894	
		Back	810	1909.8	28.79	29.00	-1.022	0.820	1.050	0.861	
		Left	661	1880.0	29.28	29.50	-1.470	0.271	1.052	0.285	
		Bottom	661	1880.0	29.28	29.50	-0.890	0.533	1.052	0.561	
WCDMA Band II	RMC	Front	9400	1880.0	23.82	24.00	2.220	0.195	1.042	0.204	
		Back	9400	1880.0	23.82	24.00	-1.360	0.475	1.042	0.497	
		Left	9400	1880.0	23.82	24.00	-2.400	0.180	1.042	0.188	
		Bottom	9400	1880.0	23.82	24.00	-1.560	0.291	1.042	0.305	
WCDMA Band IV	RMC	Front	1450	1740.0	24.82	25.00	0.030	0.238	1.042	0.248	
		Back	1312	1712.4	24.76	25.00	0.085	1.054	1.057	1.114	
		Back	1450	1740.0	24.82	25.00	2.180	1.075	1.042	1.120	
		Back	1513	1752.6	24.70	25.00	-1.250	1.043	1.072	1.118	
		Left	1450	1740.0	24.82	25.00	2.920	0.171	1.042	0.178	
		Bottom	1450	1740.0	24.82	25.00	1.020	0.656	1.042	0.684	
WCDMA Band V	RMC	Front	4183	836.6	23.95	24.00	-1.390	0.157	1.012	0.159	
		Back	4183	836.6	23.95	24.00	2.740	0.291	1.012	0.294	
		Left	4183	836.6	23.95	24.00	-2.550	0.137	1.012	0.139	
		Bottom	4183	836.6	23.95	24.00	-1.960	0.147	1.012	0.149	
2.4G	802.11b	Front	6	2437	18.81	19.00	3.600	0.115	1.045	0.120	
		Back	6	2437	18.81	19.00	1.600	0.228	1.045	0.238	
		Right	6	2437	18.81	19.00	-3.590	0.156	1.045	0.163	
		Top	6	2437	18.81	19.00	4.890	0.131	1.045	0.137	
5.2G	802.11ac (VTH40)	Front	38	5190	17.91	18.00	-2.860	0.433	1.021	0.442	
		Back	38	5190	17.91	18.00	-3.430	0.437	1.021	0.446	
		Right	38	5190	17.91	18.00	2.000	0.240	1.021	0.245	
		Top	38	5190	17.91	18.00	1.630	0.840	1.021	0.858	
		Top	46	5230	17.21	17.50	2.050	0.795	1.069	0.850	
		Bottom	46	5230	17.21	17.50	2.050	0.795	1.069	0.850	
5.8G	802.11ac (VTH40)	Front	151	5755	17.79	18.00	-2.420	0.343	1.050	0.360	
		Back	151	5755	17.79	18.00	-2.170	0.246	1.050	0.258	
		Right	151	5755	17.79	18.00	1.540	0.186	1.050	0.195	
		Top	151	5755	17.79	18.00	-3.410	0.081	1.050	0.085	

Band	Mode	Test Position with 10 mm	CH.	Freq. (MHz)	RB allocation	RB offset	Ave. Power (dBm)	Tune-Up Limit (dBm)	Power Drift (%)	Meas. SAR1g (W/kg)	Scaling Factor	Reported SAR1g (W/kg)	Limit (W/kg)
LTE Band 2	QPSK (20MHz)	Front	18900	1880	1	0	24.94	25.00	-1.220	0.298	1.014	0.302	1.60
					50	0	24.22	24.50	-1.200	0.271	1.067	0.289	
		Back	18900	1880	1	0	24.94	25.00	1.110	0.754	1.014	0.765	
					50	0	24.22	24.50	0.800	0.716	1.067	0.764	
		Left	18900	1880	1	0	24.94	25.00	2.550	0.295	1.014	0.299	
					50	0	24.22	24.50	1.660	0.268	1.067	0.286	
		Bottom	18900	1880	1	0	24.94	25.00	1.950	0.552	1.014	0.560	
					50	0	24.22	24.50	-2.015	0.524	1.067	0.559	
LTE Band 4	QPSK (20MHz)	Front	20175	1732.5	1	0	24.94	25.00	-1.160	0.365	1.014	0.370	
					50	0	24.53	25.00	0.520	0.331	1.114	0.369	
		Back	20175	1732.5	1	0	24.94	25.00	-4.350	0.587	1.014	0.595	
					50	0	24.53	25.00	1.260	0.532	1.114	0.593	
		Left	20175	1732.5	1	0	24.94	25.00	-1.331	0.201	1.014	0.204	
					50	0	24.53	25.00	-3.600	0.182	1.114	0.203	
		Bottom	20175	1732.5	1	0	24.94	25.00	2.503	0.535	1.014	0.542	
					50	0	24.53	25.00	-2.120	0.512	1.114	0.570	
LTE Band 5	QPSK (10MHz)	Front	20600	844	1	0	24.80	25.00	-1.160	0.161	1.047	0.169	
					25	0	22.92	23.00	-1.200	0.155	1.019	0.158	
		Back	20600	844	1	0	24.80	25.00	-3.980	0.449	1.047	0.470	
					25	0	22.92	24.50	1.003	0.411	1.019	0.419	
		Left	20600	844	1	0	24.80	25.00	-1.331	0.158	1.047	0.165	
					25	0	22.92	24.50	2.360	0.152	1.019	0.155	
		Bottom	20600	844	1	0	24.80	25.00	2.503	0.295	1.047	0.309	
					25	0	22.92	24.50	-3.066	0.268	1.019	0.273	
LTE Band 7	QPSK (20MHz)	Front	21100	2535	1	0	24.78	25.00	-1.160	0.339	1.052	0.357	
					50	0	24.75	25.00	2.600	0.312	1.059	0.330	
		Back	21100	2535	1	0	24.78	25.00	3.120	0.757	1.052	0.796	
					50	0	24.75	25.00	-2.066	0.751	1.059	0.795	
		Left	21100	2535	1	0	24.78	25.00	-1.331	0.336	1.052	0.353	
					50	0	24.75	25.00	-1.230	0.309	1.059	0.327	
		Bottom	21100	2535	1	0	24.78	25.00	2.503	0.593	1.052	0.624	
					50	0	24.75	25.00	-2.200	0.565	1.059	0.598	
LTE Band 12	QPSK (10MHz)	Front	23060	704	1	0	24.90	25.00	-1.160	0.103	1.023	0.105	
					25	0	23.11	23.50	-1.100	0.100	1.094	0.109	
		Back	23060	704	1	0	24.90	25.00	2.620	0.353	1.023	0.361	
					25	0	23.11	23.50	-0.553	0.315	1.094	0.345	
		Left	23060	704	1	0	24.90	25.00	-1.331	0.100	1.023	0.102	
					25	0	23.11	23.50	1.360	0.095	1.094	0.104	
		Bottom	23060	704	1	0	24.90	25.00	2.503	0.216	1.023	0.221	
					25	0	23.11	23.50	2.044	0.209	1.094	0.229	
LTE Band 17	QPSK (10MHz)	Front	23800	711	1	0	24.85	25.00	-1.160	0.111	1.035	0.115	
					25	0	24.54	25.00	-1.230	0.108	1.112	0.120	
		Back	23800	711	1	0	24.85	25.00	-1.630	0.361	1.035	0.374	
					25	0	24.54	25.00	-3.500	0.323	1.112	0.359	
		Left	23800	711	1	0	24.85	25.00	-1.331	0.108	1.035	0.112	
					25	0	24.54	25.00	1.800	0.103	1.112	0.115	
		Bottom	23800	711	1	0	24.85	25.00	2.503	0.224	1.035	0.232	
					25	0	24.54	25.00	-2.411	0.217	1.112	0.241	
LTE Band 66	QPSK (20MHz)	Front	132572	1770	1	0	24.87	25.00	-2.050	0.319	1.030	0.329	
					50	25	22.85	23.00	1.054	0.263	1.035	0.272	
		Back	132572	1770	1	0	24.87	25.00	-1.370	0.673	1.030	0.693	
					50	25	22.85	23.00	0.221	0.614	1.035	0.635	
		Left	132572	1770	1	0	24.87	25.00	-1.003	0.317	1.030	0.327	
					50	25	22.85	23.00	1.326	0.260	1.035	0.269	
		Bottom	132572	1770	1	0	24.87	25.00	2.006	0.541	1.030	0.557	
					50	25	22.85	23.00	-0.955	0.502	1.035	0.520	

Note:

- Per KDB 447498 D01 v06, for each exposure position, if the highest output power channel Reported SAR ≤ 0.8 W/kg, other channels SAR testing is not necessary.
- Per KDB 447498 D01 v06, head/body-worn use is evaluated with the device positioned at 0mm/10 mm from a head/flat phantom respectively filled with body tissue-equivalent medium.
- Per KDB Publication 941225 D06 where SAR test considerations for handsets (L x W ≥ 9 cm x 5 cm) are based on a composite test separation distance of 10 mm from the front, back and edges of the device with antennas 2.5 cm or closer to the edge of the device, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.
- Per KDB 447498 D01 v06, the report SAR is measured SAR value adjusted for maximum tune-up tolerance. Scaling Factor = $10^{[(\text{tune-up limit power (dBm)} - \text{Ave. power power (dBm)}) / 10]}$, where tune-up limit is the maximum rated power among all production units.
- Reported SAR (W/kg) = Measured SAR (W/kg) * Scaling Factor.
- Per KDB 865664 D01 v01r04 perform a second repeated measurement only the ratio of largest to smallest SAR for the original and first repeated measurement is >1.20 or when the original or repeated measurement is ≥ 1.45 W/kg.
- Perform a second measurement only if the original, first and second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurement is >1.20 .
- When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).

10.3. Simultaneous Transmission Conclusion

Multi-Band Simultaneous Transmission Considerations

According to FCC KDB Publication 447498 D01v05r02, transmitters are considered to be transmitting simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds. Possible transmission paths for the EUT are shown in below Figure and are color-coded to indicate communication modes which share the same path. Modes which share the same transmission path cannot transmit simultaneously with one another.



Simultaneous Transmission Procedures

This device contains transmitters that may operate simultaneously. Therefore simultaneous transmission analysis is required. Per FCC KDB 447498 D01v05r02, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤ 1.6 W/kg. When standalone SAR is not required to be measured, per FCC KDB 447498 D01v05r02 4.3.2.2), the following equation must be used to estimate the standalone 1g SAR and 10g extremity SAR for simultaneous transmission assessment involving that transmitter.

$$\text{Estimated SAR} = \frac{\sqrt{f(\text{GHz})}}{7.5(18.75)} \cdot \frac{\text{Max. power of channel, mW}}{\text{Min. Separation Distance, mm}}$$

Mode	Frequency (GHz)	Max. tune-up Power (dBm)	Exposure Position	Head	Body-worn
			Test Distance (mm)	5	10
BT	2.402	6.50	Estimated SAR (W/kg)	/	0.093

Note:

- When the minimum *test separation distance* is < 5 mm, a distance of 5 mm according is applied to determine estimated SAR.
- (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(\text{GHz})/x}]$ W/kg for test separation distances ≤ 50 mm; where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
- Per KDB 648474 D04 require when the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, using the same wireless mode test configuration for voice and data, such as UMTS, LTE and Wi-Fi, and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration.

Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Configuration	Head	Body-worn
1	WWAN+WIFI(2.4g)	Yes	Yes
2	WWAN+WIFI(5g)	Yes	Yes
3	WWAN+BT	Yes	Yes

Head

Band	Test Position	Scaled SAR				E _{max} SAR (W/kg) WWAN + WIFI 2.4G	E _{max} SAR (W/kg) WWAN + WIFI 5G	Σ _{max} SAR (W/kg) WWAN + BT	SPLSR	Remark
		WWAN	WIFI 2.4G	WIFI 5G	BT					
GSM850 (GPRS 4slots)	Left-Cheek	0.453	0.190	0.221	0.090	0.643	0.674	0.543	N/A	N/A
	Left-Tilt	0.338	0.193	0.228	0.053	0.531	0.566	0.391	N/A	N/A
	Right-Cheek	0.456	0.192	0.222	0.087	0.648	0.678	0.543	N/A	N/A
	Right-Tilt	0.339	0.194	0.229	0.054	0.533	0.568	0.393	N/A	N/A
GSM1900 (GPRS 4slots)	Left-Cheek	0.164	0.190	0.221	0.090	0.354	0.385	0.254	N/A	N/A
	Left-Tilt	0.159	0.193	0.228	0.053	0.352	0.387	0.212	N/A	N/A
	Right-Cheek	0.166	0.192	0.222	0.087	0.358	0.388	0.253	N/A	N/A
	Right-Tilt	0.162	0.194	0.229	0.054	0.356	0.391	0.216	N/A	N/A
WCDMA Band II	Left-Cheek	0.108	0.190	0.221	0.090	0.298	0.329	0.198	N/A	N/A
	Left-Tilt	0.085	0.193	0.228	0.053	0.278	0.313	0.138	N/A	N/A
	Right-Cheek	0.111	0.192	0.222	0.087	0.303	0.333	0.198	N/A	N/A
	Right-Tilt	0.089	0.194	0.229	0.054	0.283	0.318	0.143	N/A	N/A
WCDMA Band IV	Left-Cheek	0.079	0.190	0.221	0.090	0.269	0.300	0.169	N/A	N/A
	Left-Tilt	0.077	0.193	0.228	0.053	0.270	0.305	0.130	N/A	N/A
	Right-Cheek	0.081	0.192	0.222	0.087	0.273	0.303	0.168	N/A	N/A
	Right-Tilt	0.080	0.194	0.229	0.054	0.274	0.309	0.134	N/A	N/A
WCDMA Band V	Left-Cheek	0.213	0.190	0.221	0.090	0.403	0.434	0.303	N/A	N/A
	Left-Tilt	0.127	0.193	0.228	0.053	0.320	0.355	0.180	N/A	N/A
	Right-Cheek	0.218	0.192	0.222	0.087	0.410	0.440	0.305	N/A	N/A
	Right-Tilt	0.130	0.194	0.229	0.054	0.324	0.359	0.184	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 2 QPSK (20MHz)	Left-Cheek	1	0.143	0.190	0.221	0.090	0.333	0.364	0.233	N/A	N/A
		50	0.144	0.190	0.221	0.090	0.334	0.365	0.234	N/A	N/A
	Left-Tilt	1	0.122	0.193	0.228	0.053	0.315	0.350	0.175	N/A	N/A
		50	0.122	0.193	0.228	0.053	0.315	0.350	0.175	N/A	N/A
	Right-Cheek	1	0.148	0.192	0.222	0.087	0.340	0.370	0.235	N/A	N/A
		50	0.147	0.192	0.222	0.087	0.339	0.369	0.234	N/A	N/A
	Right-Tilt	1	0.129	0.194	0.229	0.054	0.323	0.358	0.183	N/A	N/A
		50	0.107	0.194	0.229	0.054	0.301	0.336	0.161	N/A	N/A
LTE Band 4 QPSK (20MHz)	Left-Cheek	1	0.208	0.190	0.221	0.090	0.398	0.429	0.298	N/A	N/A
		50	0.206	0.190	0.221	0.090	0.396	0.427	0.296	N/A	N/A
	Left-Tilt	1	0.153	0.193	0.228	0.053	0.346	0.381	0.206	N/A	N/A
		50	0.152	0.193	0.228	0.053	0.345	0.380	0.205	N/A	N/A
	Right-Cheek	1	0.24	0.192	0.222	0.087	0.432	0.462	0.327	N/A	N/A
		50	0.238	0.192	0.222	0.087	0.430	0.460	0.325	N/A	N/A
	Right-Tilt	1	0.137	0.194	0.229	0.054	0.331	0.366	0.191	N/A	N/A
		50	0.136	0.194	0.229	0.054	0.330	0.365	0.190	N/A	N/A
LTE Band 5 QPSK (10MHz)	Left-Cheek	1	0.271	0.190	0.221	0.090	0.461	0.492	0.361	N/A	N/A
		25	0.259	0.190	0.221	0.090	0.449	0.480	0.349	N/A	N/A
	Left-Tilt	1	0.249	0.193	0.228	0.053	0.442	0.477	0.302	N/A	N/A
		25	0.24	0.193	0.228	0.053	0.433	0.468	0.293	N/A	N/A
	Right-Cheek	1	0.284	0.192	0.222	0.087	0.476	0.506	0.371	N/A	N/A
		25	0.272	0.192	0.222	0.087	0.464	0.494	0.359	N/A	N/A
	Right-Tilt	1	0.262	0.194	0.229	0.054	0.456	0.491	0.316	N/A	N/A
		25	0.252	0.194	0.229	0.054	0.446	0.481	0.306	N/A	N/A
LTE Band 7 QPSK (20MHz)	Left-Cheek	1	0.047	0.190	0.221	0.090	0.237	0.268	0.137	N/A	N/A
		50	0.042	0.190	0.221	0.090	0.232	0.263	0.132	N/A	N/A
	Left-Tilt	1	0.025	0.193	0.228	0.053	0.218	0.253	0.078	N/A	N/A
		50	0.023	0.193	0.228	0.053	0.216	0.251	0.076	N/A	N/A
	Right-Cheek	1	0.060	0.192	0.222	0.087	0.252	0.282	0.147	N/A	N/A
		50	0.056	0.192	0.222	0.087	0.248	0.278	0.143	N/A	N/A
	Right-Tilt	1	0.038	0.194	0.229	0.054	0.232	0.267	0.092	N/A	N/A
		50	0.035	0.194	0.229	0.054	0.229	0.264	0.089	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 12 QPSK (10MHz)	Left-Cheek	1	0.183	0.190	0.221	0.090	0.373	0.404	0.273	N/A	N/A
		25	0.182	0.190	0.221	0.090	0.372	0.403	0.272	N/A	N/A
	Left-Tilt	1	0.162	0.193	0.228	0.053	0.355	0.390	0.215	N/A	N/A
		25	0.159	0.193	0.228	0.053	0.352	0.387	0.212	N/A	N/A
	Right-Cheek	1	0.195	0.192	0.222	0.087	0.387	0.417	0.282	N/A	N/A
		25	0.193	0.192	0.222	0.087	0.385	0.415	0.280	N/A	N/A
	Right-Tilt	1	0.174	0.194	0.229	0.054	0.368	0.403	0.228	N/A	N/A
		25	0.173	0.194	0.229	0.054	0.367	0.402	0.227	N/A	N/A
	Left-Cheek	1	0.208	0.190	0.221	0.090	0.398	0.429	0.298	N/A	N/A
		25	0.205	0.190	0.221	0.090	0.395	0.426	0.295	N/A	N/A
LTE Band 17 QPSK (10MHz)	Left-Tilt	1	0.186	0.193	0.228	0.053	0.379	0.414	0.239	N/A	N/A
		25	0.183	0.193	0.228	0.053	0.376	0.411	0.236	N/A	N/A
	Right-Cheek	1	0.220	0.192	0.222	0.087	0.412	0.442	0.307	N/A	N/A
		25	0.217	0.192	0.222	0.087	0.409	0.439	0.304	N/A	N/A
	Right-Tilt	1	0.199	0.194	0.229	0.054	0.393	0.428	0.253	N/A	N/A
		25	0.195	0.194	0.229	0.054	0.389	0.424	0.249	N/A	N/A
	Left-Cheek	1	0.208	0.190	0.221	0.090	0.398	0.429	0.298	N/A	N/A
		25	0.205	0.190	0.221	0.090	0.395	0.426	0.295	N/A	N/A
	Right-Tilt	1	0.186	0.193	0.228	0.053	0.379	0.414	0.239	N/A	N/A
		25	0.183	0.193	0.228	0.053	0.376	0.411	0.236	N/A	N/A
LTE Band 66 QPSK (20MHz)	Left-Cheek	1	0.122	0.193	0.228	0.053	0.315	0.350	0.175	N/A	N/A
		50	0.117	0.192	0.222	0.087	0.309	0.339	0.204	N/A	N/A
	Left-Tilt	1	0.100	0.192	0.222	0.087	0.292	0.322	0.187	N/A	N/A
		50	0.098	0.194	0.229	0.054	0.292	0.327	0.152	N/A	N/A
	Right-Cheek	1	0.134	0.194	0.229	0.054	0.328	0.363	0.188	N/A	N/A
		50	0.130	0.190	0.221	0.090	0.320	0.351	0.220	N/A	N/A
	Right-Tilt	1	0.112	0.190	0.221	0.090	0.302	0.333	0.202	N/A	N/A
		50	0.110	0.193	0.228	0.053	0.303	0.338	0.163	N/A	N/A
	Left-Cheek	1	0.122	0.193	0.228	0.053	0.315	0.350	0.175	N/A	N/A
		50	0.117	0.192	0.222	0.087	0.309	0.339	0.204	N/A	N/A

Hotspot(body-worn)

Band	Test Position	Scaled SAR				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
		WWAN	WIFI 2.4G	WIFI 5G	BT					
GSM850 (GPRS 4slots)	Front	0.388	0.120	0.442	0.093	0.508	0.830	0.481	N/A	N/A
	Back	0.767	0.238	0.446	0.093	1.005	1.213	0.86	N/A	N/A
	Left	0.353	/	/	/	0.353	0.353	0.353	N/A	N/A
	Right	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	0.341	/	/	/	0.341	0.341	0.341	N/A	N/A
GSM1900 (GPRS 4slots)	Front	0.362	0.120	0.442	0.093	0.482	0.804	0.455	N/A	N/A
	Back	0.894	0.238	0.446	0.093	1.132	1.340	0.987	N/A	N/A
	Left	0.285	/	/	/	0.285	0.285	0.285	N/A	N/A
	Right	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	0.561	/	/	/	0.561	0.561	0.561	N/A	N/A
WCDMA Band II	Front	0.204	0.120	0.442	0.093	0.324	0.646	0.297	N/A	N/A
	Back	0.497	0.238	0.446	0.093	0.735	0.943	0.590	N/A	N/A
	Left	0.188	/	/	/	0.188	0.188	0.188	N/A	N/A
	Right	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	0.305	/	/	/	0.305	0.305	0.305	N/A	N/A
WCDMA Band IV	Front	0.248	0.120	0.442	0.093	0.368	0.690	0.341	N/A	N/A
	Back	1.120	0.238	0.446	0.093	1.358	1.566	1.213	N/A	N/A
	Left	0.178	/	/	/	0.178	0.178	0.178	N/A	N/A
	Right	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	0.684	/	/	/	0.684	0.684	0.684	N/A	N/A
WCDMA Band V	Front	0.159	0.120	0.442	0.093	0.279	0.601	0.252	N/A	N/A
	Back	0.294	0.238	0.446	0.093	0.532	0.740	0.387	N/A	N/A
	Left	0.139	/	/	/	0.139	0.139	0.139	N/A	N/A
	Right	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	0.149	/	/	/	0.149	0.149	0.149	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 2 QPSK (20MHz)	Front	1	0.302	0.120	0.442	0.093	0.422	0.744	0.395	N/A	N/A
		50	0.289	0.120	0.442	0.093	0.409	0.731	0.382	N/A	N/A
	Back	1	0.765	0.238	0.446	0.093	1.003	1.211	0.858	N/A	N/A
		50	0.764	0.238	0.446	0.093	1.002	1.210	0.857	N/A	N/A
	Left	1	0.299	/	/	/	0.299	0.299	0.299	N/A	N/A
		50	0.286	/	/	/	0.286	0.286	0.286	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		50	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		50	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.560	/	/	/	0.560	0.560	0.560	N/A	N/A
		50	0.559	/	/	/	0.559	0.559	0.559	N/A	N/A
LTE Band 4 QPSK (20MHz)	Front	1	0.370	0.120	0.442	0.093	0.490	0.812	0.463	N/A	N/A
		50	0.369	0.120	0.442	0.093	0.489	0.811	0.462	N/A	N/A
	Back	1	0.595	0.238	0.446	0.093	0.833	1.041	0.688	N/A	N/A
		50	0.593	0.238	0.446	0.093	0.831	1.039	0.686	N/A	N/A
	Left	1	0.204	/	/	/	0.204	0.204	0.204	N/A	N/A
		50	0.203	/	/	/	0.203	0.203	0.203	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		50	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		50	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.542	/	/	/	0.542	0.542	0.542	N/A	N/A
		50	0.570	/	/	/	0.570	0.570	0.570	N/A	N/A
LTE Band 5 QPSK (10MHz)	Front	1	0.169	0.120	0.442	0.093	0.289	0.611	0.262	N/A	N/A
		25	0.158	0.120	0.442	0.093	0.278	0.600	0.251	N/A	N/A
	Back	1	0.470	0.238	0.446	0.093	0.708	0.916	0.563	N/A	N/A
		25	0.419	0.238	0.446	0.093	0.657	0.865	0.512	N/A	N/A
	Left	1	0.165	/	/	/	0.165	0.165	0.165	N/A	N/A
		25	0.155	/	/	/	0.155	0.155	0.155	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		25	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		25	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.309	/	/	/	0.309	0.309	0.309	N/A	N/A
		25	0.273	/	/	/	0.273	0.273	0.273	N/A	N/A
LTE Band 7 QPSK (20MHz)	Front	1	0.357	0.120	0.442	0.093	0.477	0.799	0.450	N/A	N/A
		50	0.330	0.120	0.442	0.093	0.450	0.772	0.423	N/A	N/A
	Back	1	0.796	0.238	0.446	0.093	1.034	1.242	0.889	N/A	N/A
		50	0.795	0.238	0.446	0.093	1.033	1.241	0.888	N/A	N/A
	Left	1	0.353	/	/	/	0.353	0.353	0.353	N/A	N/A
		50	0.327	/	/	/	0.327	0.327	0.327	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		50	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		50	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.624	/	/	/	0.624	0.624	0.624	N/A	N/A
		50	0.598	/	/	/	0.598	0.598	0.598	N/A	N/A

Band	Test Position	RB allocation	Scaled				Σ SAR (W/kg) WWAN + WIFI 2.4G	Σ SAR (W/kg) WWAN + WIFI 5G	Σ SAR (W/kg) WWAN + BT	SPLSR	Remark
			WWAN	WIFI 2.4G	WIFI 5G	Bluetooth					
LTE Band 12 QPSK (10MHz)	Front	1	0.105	0.120	0.442	0.093	0.225	0.547	0.198	N/A	N/A
		25	0.109	0.120	0.442	0.093	0.229	0.551	0.202	N/A	N/A
	Back	1	0.361	0.238	0.446	0.093	0.599	0.807	0.454	N/A	N/A
		25	0.345	0.238	0.446	0.093	0.583	0.791	0.438	N/A	N/A
	Left	1	0.102	/	/	/	0.102	0.102	0.102	N/A	N/A
		25	0.104	/	/	/	0.104	0.104	0.104	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		25	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		25	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.221	/	/	/	0.221	0.221	0.221	N/A	N/A
		25	0.229	/	/	/	0.229	0.229	0.229	N/A	N/A

LTE Band 17 QPSK (10MHz)	Front	1	0.115	0.120	0.442	0.093	0.235	0.557	0.208	N/A	N/A
		25	0.120	0.120	0.442	0.093	0.240	0.562	0.213	N/A	N/A
	Back	1	0.374	0.238	0.446	0.093	0.612	0.820	0.467	N/A	N/A
		25	0.359	0.238	0.446	0.093	0.597	0.805	0.452	N/A	N/A
	Left	1	0.112	/	/	/	0.112	0.112	0.112	N/A	N/A
		25	0.115	/	/	/	0.115	0.115	0.115	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		25	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		25	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.232	/	/	/	0.232	0.232	0.232	N/A	N/A
		25	0.241	/	/	/	0.241	0.241	0.241	N/A	N/A
LTE Band 66 QPSK (20MHz)	Front	1	0.329	0.120	0.442	0.093	0.449	0.771	0.422	N/A	N/A
		25	0.272	0.120	0.442	0.093	0.392	0.714	0.365	N/A	N/A
	Back	1	0.693	0.238	0.446	0.093	0.931	1.139	0.786	N/A	N/A
		25	0.635	0.238	0.446	0.093	0.873	1.081	0.728	N/A	N/A
	Left	1	0.327	/	/	/	0.327	0.327	0.327	N/A	N/A
		25	0.269	/	/	/	0.269	0.269	0.269	N/A	N/A
	Right	1	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
		25	/	0.163	0.245	0.093	0.163	0.245	0.093	N/A	N/A
	Top	1	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
		25	/	0.137	0.858	0.093	0.137	0.858	0.093	N/A	N/A
	Bottom	1	0.557	/	/	/	0.557	0.557	0.557	N/A	N/A
		25	0.520	/	/	/	0.520	0.520	0.520	N/A	N/A

Simultaneous Transmission Conclusion

The above numerical summed SAR results for all the case simultaneous transmission conditions were below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore measured volumetric simultaneous SAR summation is not required per FCC KDB Publication 447498 D01v05r02.

10.4. Measurement Uncertainty (450MHz-3GHz)

UNCERTAINTY EVALUATION FOR HEADSET SAR

Uncertainty Component	Description	Uncertainty Value(%)	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. 1g(%)	Std. Unc. 10g(%)	v
Measurement system									
Probe calibration	7.2.1	5.8	N	1	1	1	5.8	5.8	∞
Axial isotropy	7.2.1.1	3.5	R	$\sqrt{3}$	$(1-C_p)^{1/2}$	$(1-C_p)^{1/2}$	1.43	1.43	∞
Hemispherical isotropy	7.2.1.1	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
Boundary Effects	7.2.1.4	1.00	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	7.2.1.2	4.70	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	7.2.1.2	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation Response	7.2.1.3	3	N	1	1	1	3.00	3.00	∞
Readout Electronics	7.2.1.5	0.5	N	1	1	1	0.50	0.50	∞
Response Time	7.2.1.6	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	7.2.1.7	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF Ambient Conditions-Noise	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF Ambient Conditions-Reflection	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioned mechanical Tolerance	7.2.2.1	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	7.2.2.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation interpolation and integration algorithms for Max.SAR evaluation	7.2.4	2.3	R	1	1	1	1.33	1.33	∞
Test sample related									
Test sample positioning	7.2.2.4.4	2.6	N	1	1	1	2.60	2.60	∞
Device holder uncertainty	7.2.2.4.2 7.2.2.4.3	3	N	1	1	1	3.00	3.00	∞
output power variation-SAR drift measurement	7.2.3.6	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
SAR scaling	7.2.5	2	R	$\sqrt{3}$	1	1	1.15	1.15	∞
Phantom and tissue parameters									
Phantom uncertainty (shape and thickness tolerances)	7.2.2.2	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
uncertainty in SAR correction for deviation (in permittivity and conductivity)	7.2.6	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid conductivity -measurement uncertainty	7.2.3.3	4	N	1	0.23	0.26	0.92	1.04	∞
Liquid permittivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement uncertainty	7.2.3.4	5	N	1	0.23	0.26	1.15	1.30	∞
Combined standard uncertainty			RSS				10.83	10.54	
Expanded uncertainty (95%CONFIDENCEINTERVAL)			k				21.26	21.08	

UNCERTAINTY FOR PERFORMANCE CHECK

Uncertainty Component	Description	Uncertainty Value(%)	Probably Distribution	Div.	(Ci) 1g	(Ci) 10g	Std. Unc. 1g(%)	Std. Unc. 10g(%)	v
Measurement system									
Probe calibration	7.2.1	5.8	N	1	1	1	5.8	5.8	∞
Axial isotropy	7.2.1.1	3.5	R	$\sqrt{3}$	$(1-C_p)^{1/2}$	$(1-C_p)^{1/2}$	1.43	1.43	∞
Hemispherical isotropy	7.2.1.1	5.9	R	$\sqrt{3}$	$\sqrt{C_p}$	$\sqrt{C_p}$	2.41	2.41	∞
Boundary Effects	7.2.1.4	1.00	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Linearity	7.2.1.2	4.70	R	$\sqrt{3}$	1	1	2.71	2.71	∞
System detection limits	7.2.1.2	1	R	$\sqrt{3}$	1	1	0.58	0.58	∞
Modulation Response	7.2.1.3	3	N	1	1	1	0.00	0.00	∞
Readout Electronics	7.2.1.5	0.5	N	1	1	1	0.50	0.50	∞
Response Time	7.2.1.6	0	R	$\sqrt{3}$	1	1	0.00	0.00	∞
Integration Time	7.2.1.7	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
RF Ambient Conditions-Noise	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
RF Ambient Conditions-Reflection	7.2.3.7	3	R	$\sqrt{3}$	1	1	1.73	1.73	∞
Probe positioned mechanical Tolerance	7.2.2.1	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Probe positioning with respect to phantom shell	7.2.2.3	1.4	R	$\sqrt{3}$	1	1	0.81	0.81	∞
Extrapolation interpolation and integration algorithms for Max.SAR evaluation	7.2.4	2.3	R	1	1	1	1.33	1.33	∞
Dipole									
Deviation of experimental source from numerical source		4	N	1	1	1	4.00	4.00	∞
Input power and SAR drift measurement	7.2.3.6	5	R	$\sqrt{3}$	1	1	2.89	2.89	∞
Dipole axis to liquid distance		2	R	$\sqrt{3}$	1	1			∞
Phantom and tissue parameters									
Phantom uncertainty (shape and thickness tolerances)	7.2.2.2	4	R	$\sqrt{3}$	1	1	2.31	2.31	∞
uncertainty in SAR correction for deviation (in permittivity and conductivity)	7.2.6	2	N	1	1	0.84	2.00	1.68	∞
Liquid conductivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid conductivity -measurement uncertainty	7.2.3.3	4	N	1	0.23	0.26	0.92	1.04	∞
Liquid permittivity (temperature uncertainty)	7.2.3.5	2.5	N	1	0.78	0.71	1.95	1.78	∞
Liquid permittivity measurement uncertainty	7.2.3.4	5	N	1	0.23	0.26	1.15	1.30	∞
Combined standard uncertainty			RSS				10.15	10.05	
Expanded uncertainty (95%CONFIDENCEINTERVAL)			k				20.29	20.10	

10.5. Test Equipment List

Test Equipment	Manufacturer	Model	Serial Number	Calibration	
				Calibration Date (D.M.Y)	Calibration Due (D.M.Y)
PC	Lenovo	H3050	N/A	N/A	N/A
Signal Generator	Agilent	N5182A	MY47070282	Jun. 08, 2022	Jun. 07, 2023
Multimeter	Keithley	Multimeter 2000	4078275	Jun. 08, 2022	Jun. 07, 2023
Network Analyzer	Agilent	8753E	US38432457	Jun. 08, 2022	Jun. 07, 2023
Wireless Communication Test Set	R & S	CMU200	111382	Jun. 08, 2022	Jun. 07, 2023
Wideband Radio Communication Tester	R&S	CMW500	114220	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	E4418B	GB43312526	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	E4416A	MY45101555	Jun. 08, 2022	Jun. 07, 2023
Power Meter	Agilent	N1912A	MY50001018	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9301A	MY41497725	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9327A	MY44421198	Jun. 08, 2022	Jun. 07, 2023
Power Sensor	Agilent	E9323A	MY53070005	Jun. 08, 2022	Jun. 07, 2023
Power Amplifier	PE	PE15A4019	112342	N/A	N/A
Directional Coupler	Agilent	722D	MY52180104	N/A	N/A
Attenuator	Chensheng	FF779	134251	N/A	N/A
E-Field PROBE	MVG	SSE2	SN 36/20 EPGO346	Oct. 08, 2022	Oct. 07, 2023
DIPOLE 750	MVG	SID750	SN 16/15 DIP 0G750-368	Jun. 05, 2021	Jun. 04, 2024
DIPOLE 835	MVG	SID835	SN 16/15 DIP 0G835-369	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 1800	MVG	SID 1800	SN 16/15 DIP 1G800-371	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 1900	MVG	SID1900	SN 16/15 DIP 1G900-372	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 2450	MVG	SID 2450	SN 16/15 DIP 2G450-374	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 2600	MVG	SID 2600	SN 16/15 DIP 2G600-375	Jun. 05, 2022	Jun. 04, 2023
DIPOLE 5200-5800	MVG	SID 5000	SN 13/14 WGA32	May 15, 2022	May 14, 2023
Limesar Dielectric Probe	MVG	SCLMP	SN 19/15 OCPG71	Jun. 05, 2022	Jun. 04, 2023
Communication Antenna	MVG	ANTA59	SN 39/14 ANTA59	N/A	N/A
Mobile Phone Position Device	MVG	MSH101	SN 19/15 MSH101	N/A	N/A
Dummy Probe	MVG	DP66	SN 13/15 DP66	N/A	N/A
SAM PHANTOM	MVG	SAM120	SN 19/15 SAM120	N/A	N/A
PHANTOM TABLE	MVG	TABP101	SN 19/15 TABP101	N/A	N/A
Robot TABLE	MVG	TABP61	SN 19/15 TABP61	N/A	N/A
6 AXIS ROBOT	KUKA	KR6-R900	501822	N/A	N/A

Note: 1. N/A means this equipment no need to calibrate

2. Each Time means this device need to calibrate every use time

3. The dipole was not damaged properly repaired.

4. The measured SAR deviates from the calibrated SAR value by less than 10%

5. The most recent return-loss result meets the required 20 dB minimum return-loss requirement

6. The most recent measurement of the real or imaginary parts of the impedance deviates by less than 5 Ω from the previous measurement.

11. System Check Results

Date of measurement: 02/23/2023 Test mode: 750 (Body)

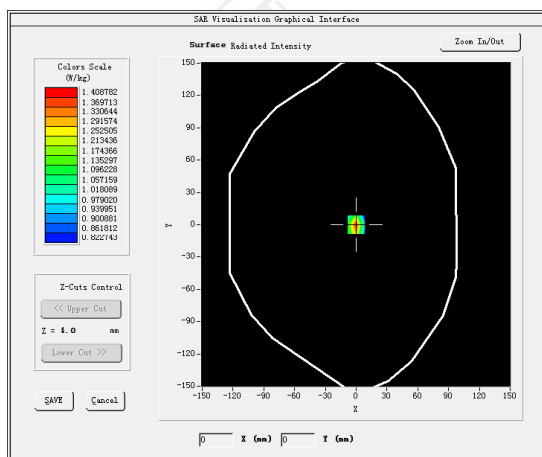
Product Description: Validation

Dipole Model: SID750

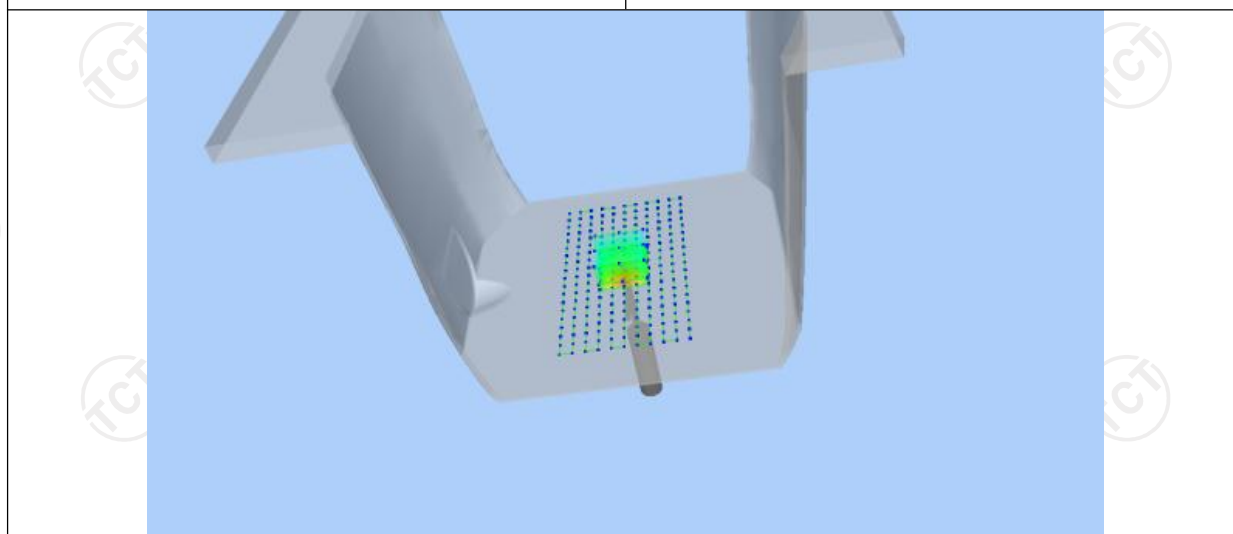
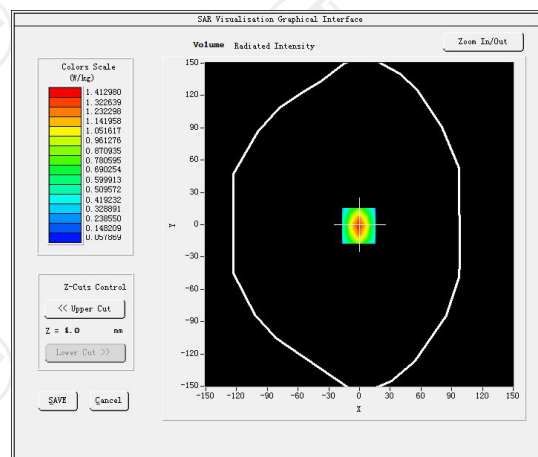
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	1.78
Frequency (MHz)	750.000000
Relative permittivity (real part)	56.121166
Relative permittivity (imaginary part)	20.148160
Conductivity (S/m)	0.921243
Variation (%)	-0.150000
SAR 10g (W/Kg)	0.602014
SAR 1g (W/Kg)	0.872441

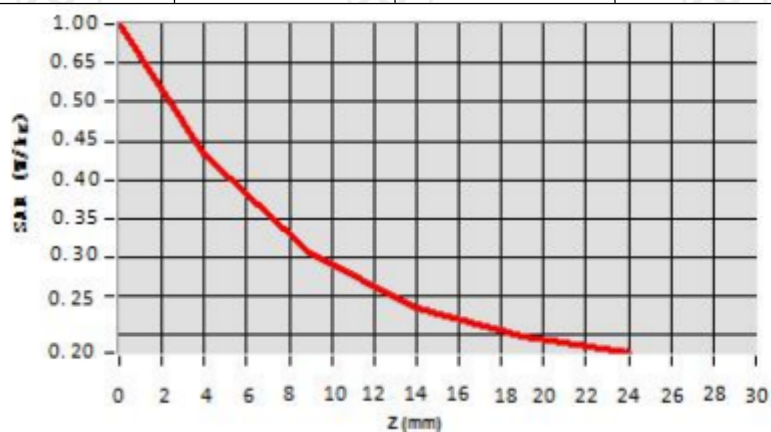
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	1.014	0.4420	0.3029	0.2419	0.2240



Hot spot position



Date of measurement: 02/23/2023 Test mode: 835 (Body)

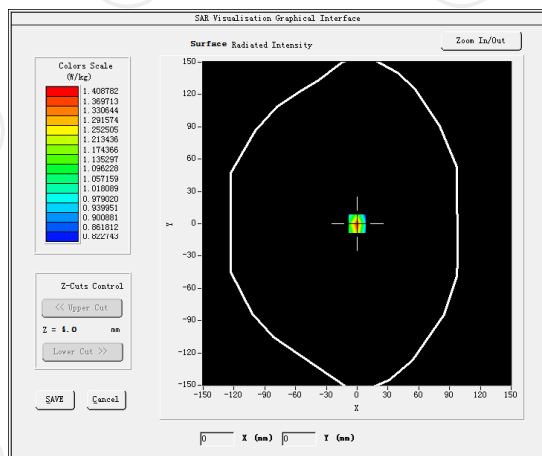
Product Description: Validation

Dipole Model: SID835

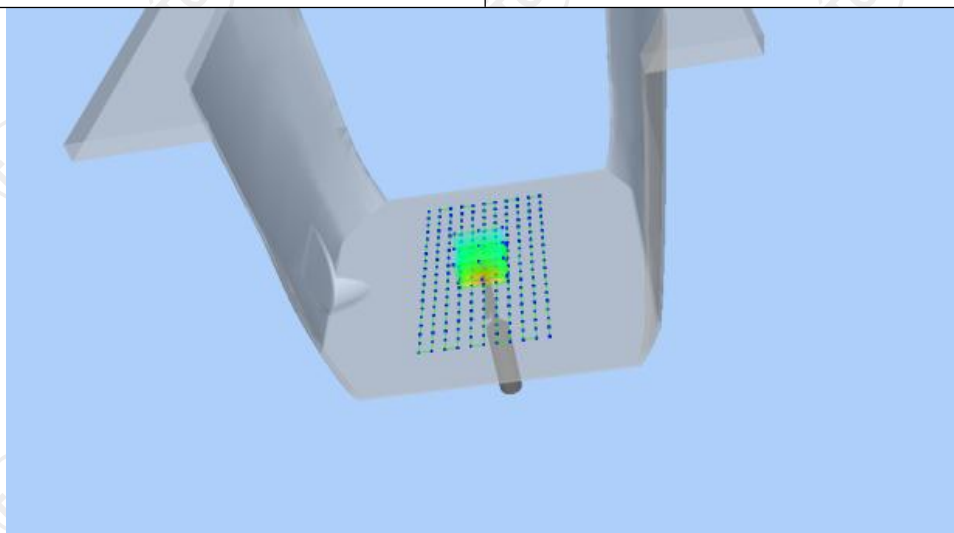
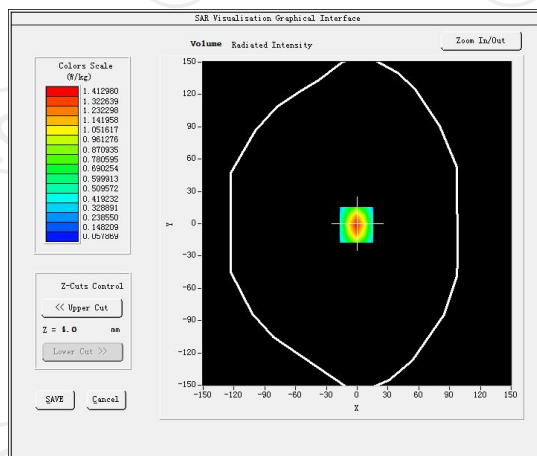
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	8.0
Probe Conversion factor	1.86
Frequency (MHz)	835.000000
Relative permittivity (real part)	55.242077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	0.938883
Variation (%)	-0.150000
SAR 10g (W/Kg)	0.633123
SAR 1g (W/Kg)	0.949446

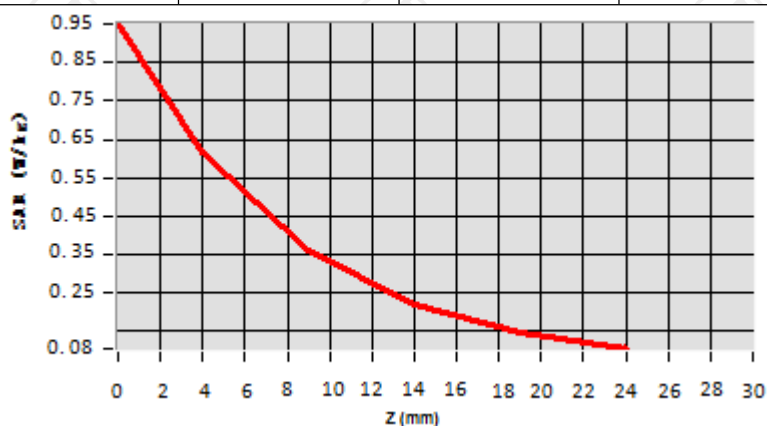
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.9625	0.6022	0.3594	0.2202	0.0725



Hot spot position



Date of measurement: 02/24/2023 Test mode: 1800MHz (Body)

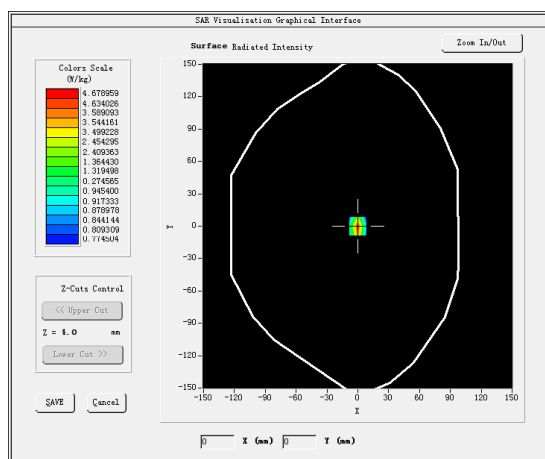
Product Description: Validation

Dipole Model: SID1800

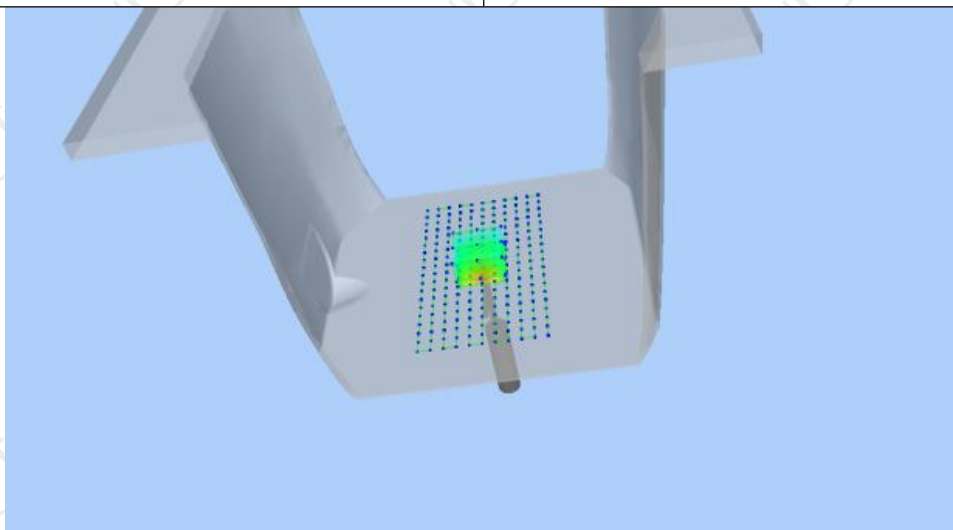
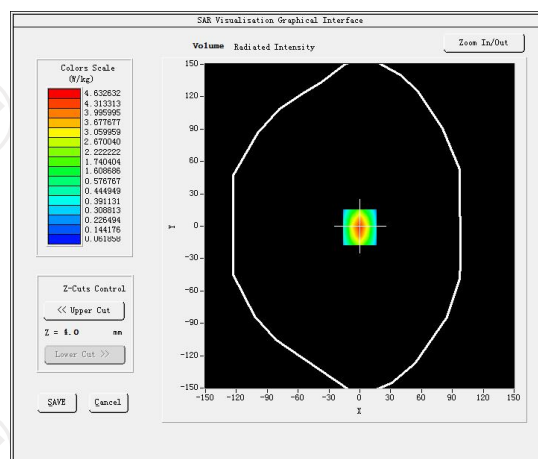
E-Field Probe: SSE2 (SN 36/20 EPG0346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.16
Frequency (MHz)	1800.000000
Relative permittivity (real part)	53.292699
Relative permittivity (imaginary part)	15.200000
Conductivity (S/m)	1.530000
Variation (%)	3.050000
SAR 10g (W/Kg)	2.053687
SAR 1g (W/Kg)	3.782547

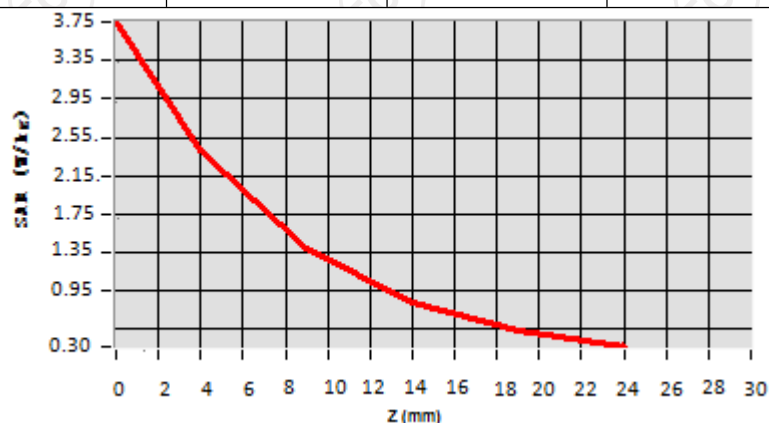
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7545	2.4524	1.3520	0.8214	0.5525



Hot spot position



Date of measurement: 02/24/2023 Test mode: 1900MHz (Body)

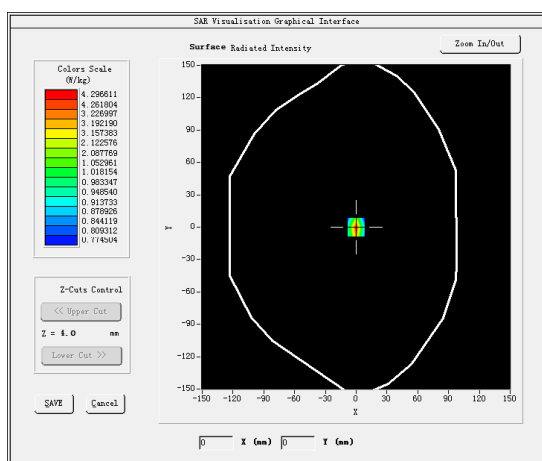
Product Description: Validation

Dipole Model: SID1900

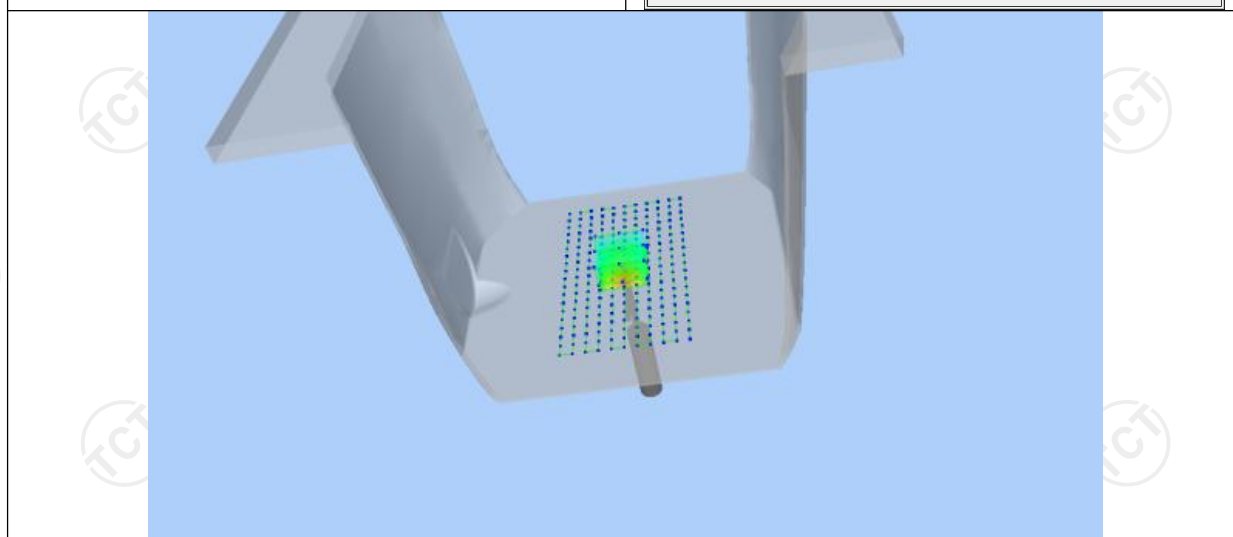
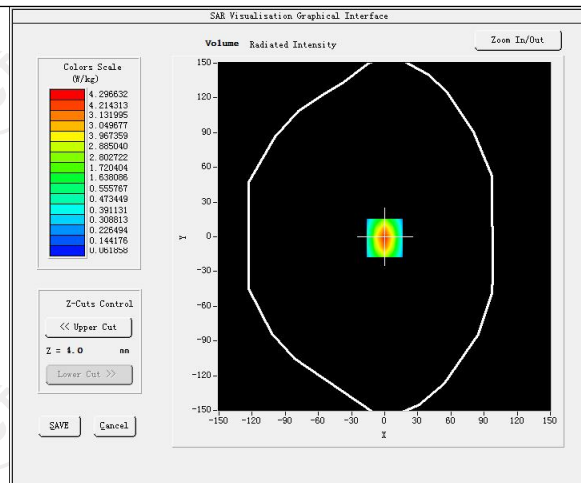
E-Field Probe: SSE2 (SN 36/20 EPG0346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	8.0
Probe Conversion factor	2.32
Frequency (MHz)	1900.000000
Relative permittivity (real part)	52.230999
Relative permittivity (imaginary part)	14.329440
Conductivity (S/m)	1.580354
Variation (%)	1.250000
SAR 10g (W/Kg)	1.994255
SAR 1g (W/Kg)	3.766112

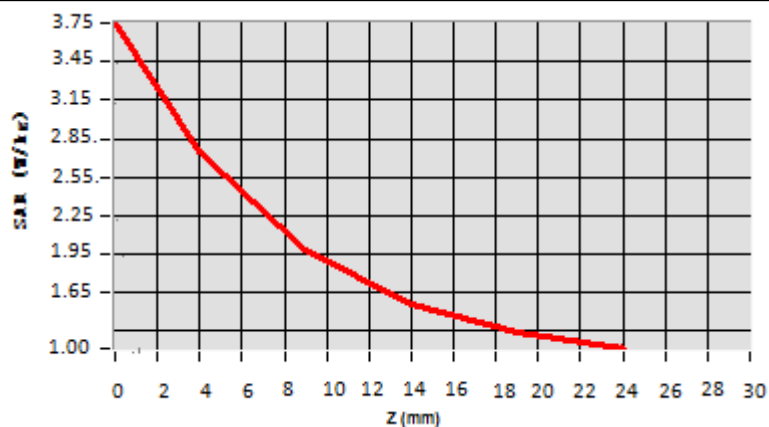
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	3.7752	2.7154	1.9525	1.5694	0.9014



Hot spot position



Date of measurement: 02/27/2023 Test mode: 2450MHz (Body)

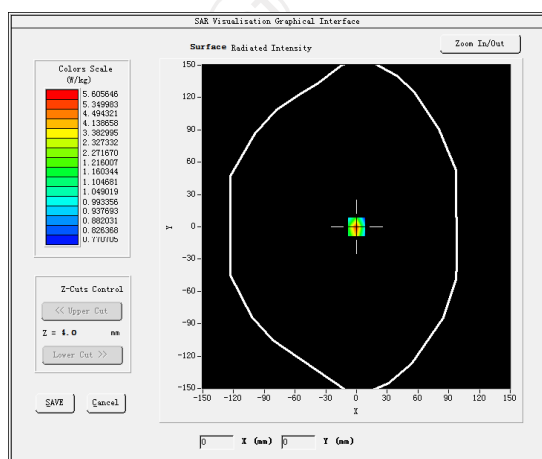
Product Description: Validation

Dipole Model: SID2450

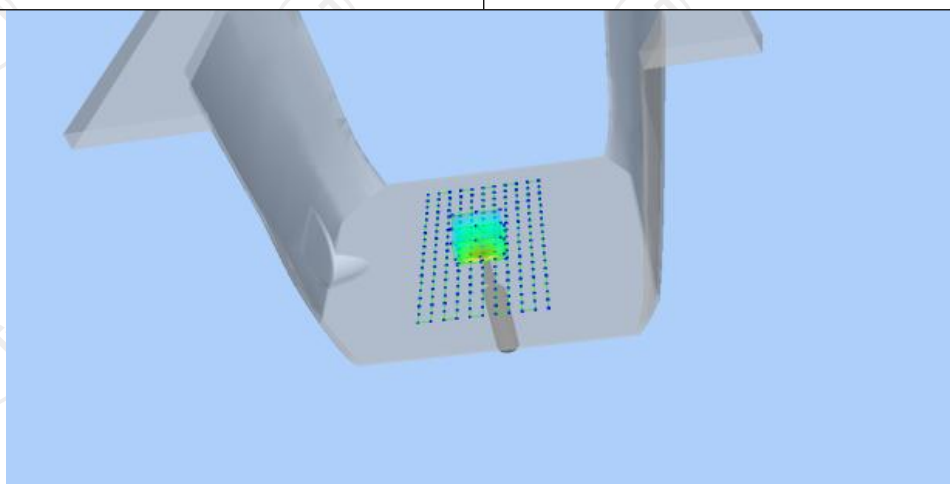
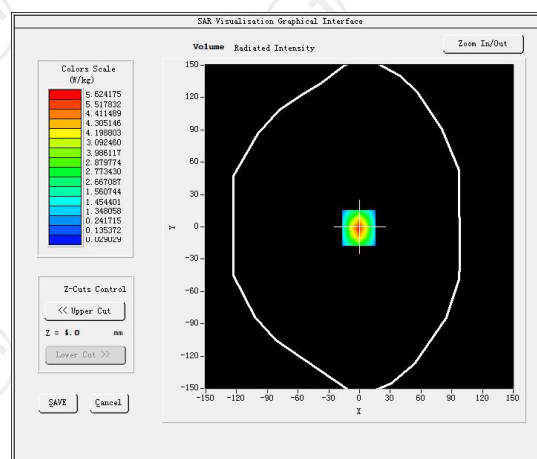
E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.37
Frequency (MHz)	2450.000000
Relative permittivity (real part)	51.921199
Relative permittivity (imaginary part)	14.930150
Conductivity (S/m)	2.012159
Variation (%)	-0.230000
SAR 10g (W/Kg)	2.416669
SAR 1g (W/Kg)	5.066368

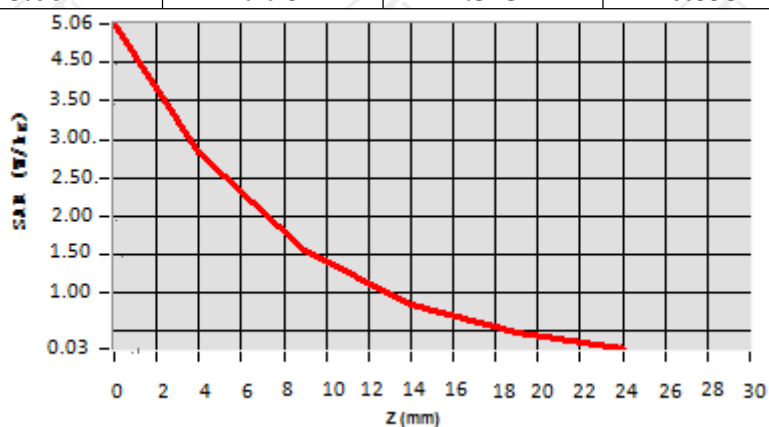
SURFACE SAR



VOLUME SAR



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.0622	2.7984	1.5251	0.8352	0.4200



Hot spot position



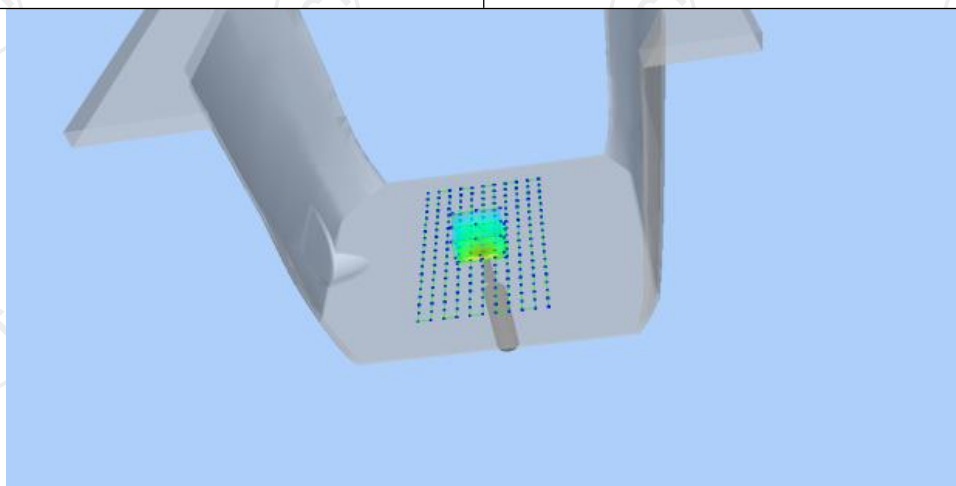
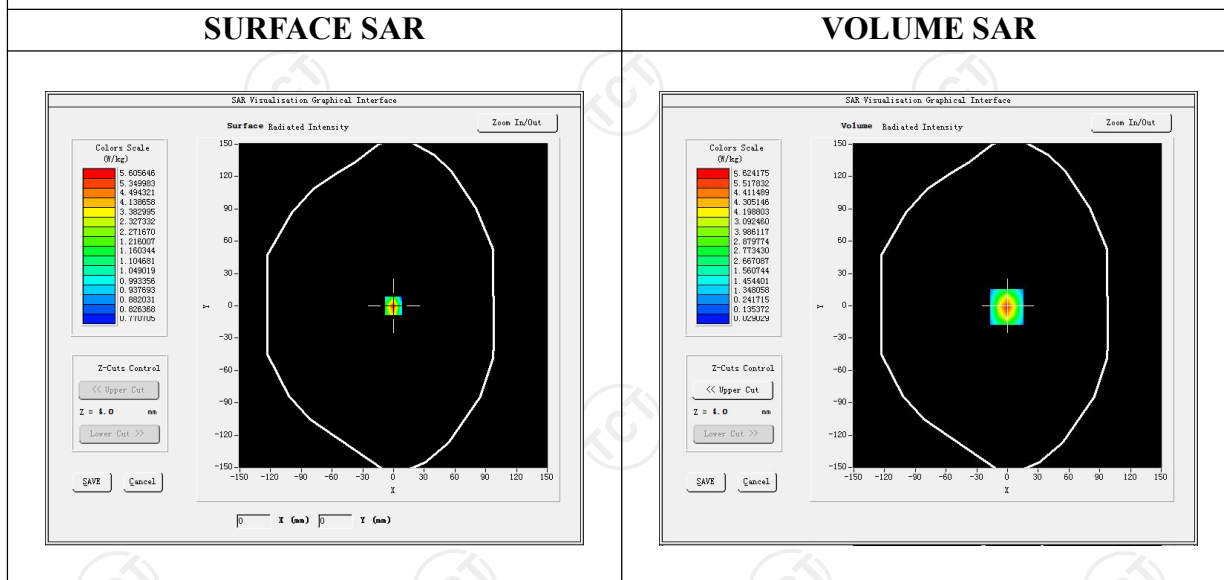
Date of measurement: 02/27/2023 Test mode: 2600MHz (Body)

Product Description: Validation

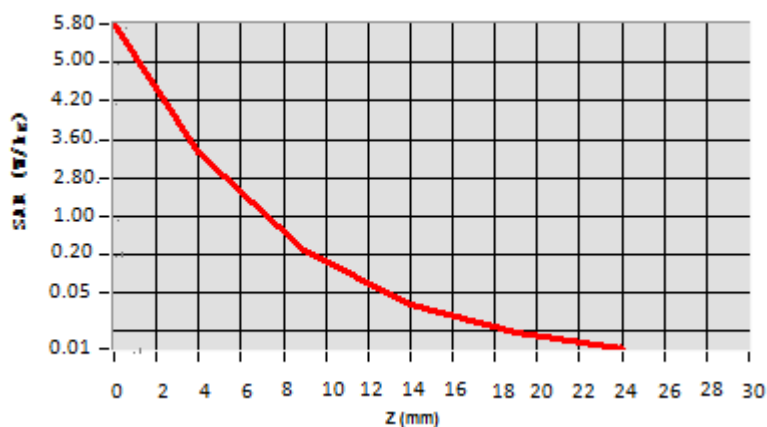
Dipole Model: SID2600

E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.23
Frequency (MHz)	2600.000000
Relative permittivity (real part)	51.830887
Relative permittivity (imaginary part)	14.935214
Conductivity (S/m)	2.134821
Variation (%)	-1.800000
SAR 10g (W/Kg)	2.382177
SAR 1g (W/Kg)	5.365098



Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	5.7721	3.2210	0.1937	0.0321	0.0203



Hot spot position



Date of measurement: 02/28/2023 Test mode: 5200 (Body)

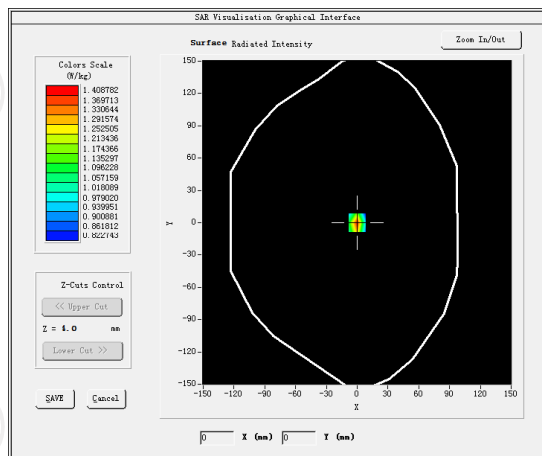
Product Description: Validation

Dipole Model: SID5000

E-Field Probe: SSE2 (SN 36/20 EPGO346)

Phantom	Validation plane
Input Power	100mW
Crest Factor	1.0
Probe Conversion factor	2.08
Frequency (MHz)	5200.000000
Relative permittivity (real part)	49.522077
Relative permittivity (imaginary part)	21.378187
Conductivity (S/m)	5.403883
Variation (%)	-3.140000
SAR 10g (W/Kg)	5.513123
SAR 1g (W/Kg)	15.472446

SURFACE SAR



VOLUME SAR

